

REMARKS

Claim 5, 7-11, 14, 16,-20, 22, and 24 remain in the application with claims 5, 12, 16, and 22 having been amended hereby. Claims 11, 15, 21 and 30 have been canceled, without prejudice or disclaimer.

Reconsideration is respectfully requested of the rejection of claims 5, 7-10, and 14 under 35 USC 103, as being unpatentable over Gefvert in view of Ruzicka and Siems et al.

Claim 5 has been added to claim 11 and claim 11 was previously rejected as being unpatentable over Gefvert, Ruzicka and Siems et al. in further view of Glover. Therefore, Glover will be discussed along with the three other references in this rejection.

The present invention relates to a system for interconnecting loudspeakers in an audio/visual system and has a number of cables and plugs that are marked or identified by using colors on shrink-wrap tubes and having special plugs that maintain the polarity of the speakers, a necessary feature in an audio system. Accordingly, the claims detail the numerous features of this invention, which involve elements already known but not previously assembled as in the presently claimed invention.

Gefvert shows a sound system with a number of loudspeakers connected to an amplifier, and the connections are arranged corresponding to physical locations of the speakers.

Ruizcka is cited for its mention that it is known to use color coding for connection in a speaker system.

Siems et al. relates to an engine wiring system and is cited for its use of shrink plastic markers used as labels in the auto wiring system.

Glover relates to an electrical connector assembly and specifically to a high voltage connector for installation in a panel cut-out during an in-field of retro-fitting operation.

The Examiner contends that the features set forth in the present claims can be found among these various references. Nevertheless, it is respectfully submitted that the invention must be viewed as a whole and not piece by piece relative to its various elements. See Jones v. Hardy 727 F2d 1524, 220 USPQ 1021 (Fed. Cir. 1984). Moreover, as the court stated in Jones, it is irrelevant in determining obviousness that all aspects of the claim may have been well known in the art. Citing Medtronic Inc. v. Cardiac Pacemakers Inc. 1721 F2d 1563, 220 USPQ/97 (Fed. Cir. 1983).

Therefore, the present invention as set forth in the claims must be considered as a whole and not as being made up of individual parts, which may be found in a catalog of references.

Moreover, the references should be fairly taken for what they teach and as clearly stated in Ruzicka and Siems et al. it is not desirable to use colors in identifying wiring elements. Nevertheless, that is what the present invention does.

Therefore, it is respectfully submitted that the references teach away from the present invention, because they teach it is disadvantageous to employ colors identifying the various wiring elements.

The cancellation of claims 11 and 15 renders moot the rejection thereof under 35 USC 103.

Reconsideration is respectfully requested of the rejection of claim 12 under 35 USC 103, as being unpatentable over Gefvert, Ruzicka, and Siems et al. and further in view of Glover and Lee.

Claim 12 now depends from claim 5 which for the reasons set forth hereinabove is thought to be patentably distinct over the cited references and, for at least those very same reasons, claim 12 is also submitted to be patentably thereover.

Reconsideration is respectfully requested of the rejection of claims 16, 17, 20, and 24 under 35 USC 103, as being unpatentable over Ruzicka in view of Siems et al.

Claim 16 has been amended hereby to include the features set forth previously in claim 21, which claim was rejected as being unpatentable over Ruzicka and Siems et al. in view of Glover.

As noted hereinabove the present invention provides a combination of previously known elements in a system not previously shown or suggested. ]

The fact that Ruzicka could be modified by utilizing elements of the other cited references is not a valid test in deciding the patentability of the claimed invention, because the

claimed invention is being used as a instruction manual to piece art teachings. See in re Fritch 972 F2d 1260, 23 USPQ2d (Fed. Cir. 1992).

Moreover, as noted hereinabove both Siems et al. and Ruzicka state that it is not useful to use color in identifying wiring in various systems. Not only that but Glover relates to a high-voltage connector and not to an audio connector, so that one of ordinary skill in the art would not typically be led to utilizing elements found in a high voltage connector system in an audio wiring system, as taught by the present invention and as recited in the amended claims. ]

Reconsideration is respectfully requested of the rejection of claims 18 and 19 under 35 USC 103, as being unpatentable over Ruzicka in view of Siems et al. ]

Claims 18 and 19 depend from claim 16 which for the reasons set forth hereinabove is thought to be patentably distinct over the cited references and, for at least for those very same reasons claims 18 and 19 are also submitted to be patentably distinct thereover.

The cancellation of claim 21 renders moot the rejection thereof under 35 USC 103.

Reconsideration is respectfully requested of the rejection of claim 22 under 35 USC 103, as being unpatentable over Ruzicka and Siems et al. in view of Glover and Lee.

Claim 22 depends from claim 16 which for the reasons set

forth hereinabove is thought to be patentably distinct over the cited references, and for at least those very same reasons, claim 22 is also submitted to be patentably distinct thereover.

The cancellation of claim 30 renders moot the rejection thereof under 35 USC 103.

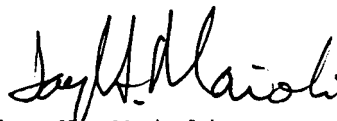
Accordingly, by reason of the amendments made to the claims hereby as well as the above remarks, it is respectfully submitted that the multi-channel audio system, as taught by the present invention and as recited in the amended claims, is neither shown nor suggested in the cited references, alone or in combination.

Entry of this amendment is earnestly solicited and it is respectfully submitted that the amendment raises no new issues requiring further consideration and or search. The independent claims have been amended to incorporate features previously set forth in dependent claims.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADEIN THE CLAIMS

Please amend claims 5, 12, 16, 22 by rewriting same to read as follows and cancel claims 11, 15, 21 and 30 without prejudice or disclaimer.

--5. (Thrice Amended) A multi-channel audio system comprising:

an electronic apparatus provided with at least four audio signal output terminals for a plurality of channels;

a plurality of speakers for generating acoustic output for each of said plurality of channels in a form of audio signals output from said audio signal output terminals; and

a plurality of connecting cable members, each of said plurality of connecting cable members incorporating a pair of conductor members bearing a pair of polarities and sheathed by one of a plurality of insulating sheathing members for connecting said electronic apparatus to said plurality of speakers, wherein

each of said audio signal output terminals is arranged corresponding to positions of said plurality of speakers, said plurality of speakers being arranged corresponding to said plurality of channels, wherein

each of said audio signal output terminals is distinguished by one of a plurality of colors for enabling each of said plurality of channels to be discernible; and

each of said plurality of connecting cable members is distinguished by one of said plurality of colors corresponding to a color distribution of said audio signal output terminals, [and] wherein

said distinction of each of said plurality of connecting cable members is implemented by a plurality of thermally contractile tubes each bearing a different color secured to each of said plurality of connecting cable members[.], and wherein

one end of said connecting cable member has a plug connector structure fitted with said pair of conductor members in the form of a pair of coupling holes respectively connected to two conductor portions;

said audio signal output terminals conform to a socket connector structure coupled with said plug connector member;

said socket connector has a pair of connecting pins bearing a pair of polarities and position-controlling means for matching said polarities when an other of said plug connectors is coupled with said socket connector;

wherein said pair of coupling holes are to be coupled with said two connecting pins and said plug connector includes a position-controlling means coupling portion to be coupled with said position-controlling means of said socket connector for matching said polarities; and

said color for distinguishing said individual connecting cable members corresponds to a color provided for said plug

connector.

--12. (Twice Amended) The multi-channel audio system according to Claim [11] 5, wherein said plug connector member is secured to both ends of each of said plurality of connecting cable members said socket connector is secured to each of said plurality of speaker terminals.

--16. (Thrice Amended) A multi-channel audio system comprising:

an electronic apparatus having a plurality of audio signal output terminals compatible with at least four of a plurality of channels;

a plurality of speakers for generating acoustic output for each of said plurality of channels in the form of an audio signal output from each of said plurality of audio signal output terminals; and

a plurality of connecting cable members each having a pair of conductor members bearing a pair of polarities, and each of said plurality of connecting cable members are individually sheathed with an insulating sheathing member and are used for connecting said electronic apparatus and said plurality of speakers, wherein

said audio signal output terminals corresponding to said plurality of channels provided for said electronic apparatus are individually distinguished by associating each of said



plurality of channels with a color to visually discern individual channels; and

said plurality of connecting cable members is provided with a specific color corresponding to said colors provided for each of said plurality of audio signal output terminals for visual discernment of individual channels, wherein

said distinguishing of each of said plurality of connecting cable members is performed using a plurality of thermally contractile tubes each bearing a different color and secured to each of said plurality of connecting cable members[.], wherein

one end of each of said plurality of connecting cable members has a first connector structure fitted with a pair of connecting pins bearing a pair of polarities each connected to two conductor portions;

each of said plurality of audio signal output terminals conforms to a second connector structure and is coupled with said first connector member;

said first connector member has position-controlling means for matching said polarities when coupled with an other of said second connector members;

another of said second connector members has a pair of coupling holes coupled with said pair of connecting pins and a position-controlling-means coupling portion coupled with said position-controlling means of said first connector member for matching said polarities; and

said color for distinguishing said individual connecting cable members corresponds to said color provided for said first connector member.

--22. (Amended) The multi-channel audio system according to Claim [21] 16, wherein said first connector member is secured to both ends of each of said plurality of connecting cable members and said second connector member is secured to each of said plurality of speaker terminals.